

IN THE ABSTRACT

Please replace the Abstract on page 15 of the specification with the following

Abstract:

Ready-to-use aqueous coolant compositions having alkylene glycols, glycerol and/or 1,3-propanediol and a) from 0.05 to 10% by weight, based on the total amount of the composition, of one or more polyethylene glycols and/or polypropylene glycols and b) from 0.01 to 10% by weight, based on the total amount of the composition, of one or more carboxamides and/or sulfonamides are useful for inhibiting corrosion in the case of magnesium and magnesium alloys.

SUPPORT FOR AMENDMENTS

The claims are amended for clarity and to comply with U.S. Patent practice. Support for the amendments to Claims 1 – 9 and 11 – 12 can be found in the claims as previously presented. Support for the amendments to Claim 13 can be found in the specification at page 6, lines 9 – 12. Claims 14 – 18 are newly added; support can be found in the specification, listed below:

- Claim 14: page 6, lines 18 – 25;
- Claim 15: page 6, lines 34 – 37;
- Claim 16: page 7, lines 1 – 2; and
- Claims 17 and 18: page 10, Table 1.

New matter has not been added.

REMARKS/ARGUMENTS

Claims 1 – 10 and 13 – 17 relate to antifreeze concentrates based on alkylene glycol, glycerol, 1,3-propanediol, or a combination thereof, said antifreeze concentrate comprising:

a) from 0.05 to 10% by weight, based on a total amount of the concentrate, of at least one of a polyethylene glycol, a polypropylene glycol, or a combination thereof selected from the group consisting of triethylene glycol, tetraethylene glycol, pentaethylene glycol, hexaethylene glycol, tripropylene glycol, tetrapropylene glycol, pentapropylene glycol, hexapropylene glycol and a mixture thereof; b) from 0.01 to 10% by weight, based on a total amount of the concentrate, of at least one carboxamide, sulfonamide, or a combination thereof, wherein the amide group of the sulfonamide is unsubstituted or substituted with alkyls; c) from 0.05 to 10% by weight, based on a total amount of the concentrate, of at least one aliphatic, cycloaliphatic or aromatic amine comprising 2 to 15 carbon atoms, which may additionally comprise an etheroxygen atom or a hydroxyl group; and d) from 0.05 to 10% by

weight, based on a total amount of the concentrate, of at least one mononuclear or dinuclear unsaturated or partly unsaturated heterocycle comprising 4 to 10 carbon atoms.

Claim 11 relates to aqueous coolant compositions comprising: water; and from 30 to 70% by weight of the concentrate of claim 1.

Claim 12 relates to methods for preventing corrosion of magnesium and magnesium alloys in internal combustion engines comprising: obtaining an aqueous coolant composition of Claim 11; and contacting the aqueous coolant composition with internal combustion engines.

Claim 18 relates to antifreeze concentrates comprising: i) 2.5 wt% of a mixture of p-toluenesulfonamide and 1H-1,2,4-triazole; ii) 3 wt% of tripropylene glycol; iii) 50 wt% distilled water; wherein the i), ii), and iii) are dissolved in monoethylene glycol and the weight percentages are relative to the total weight of the concentrate.

The inventors have found the presently claimed antifreeze concentrates are particularly effective for preventing the corrosion of magnesium and magnesium alloy engine parts. The cited references contain no disclosure or suggestion of the presently claimed concentrates. Accordingly, these references cannot affect the patentability of the present claims.

The rejection of Claims 1 – 13 under 35 U.S.C. § 103(a) in view of WIPO Publication No. WO 02/008354 (**Wenderoth et al.**) (U.S. equivalent – U.S. Application Publication No. 2003/0164470) in view of Russian Publication No. SU 1838362 (**Ashikhmin et al.**) is respectfully traversed. **Wenderoth et al.** may disclose antifreeze concentrates based on amides, and coolant compositions comprising them and intended for protecting magnesium and magnesium alloys. As the Examiner notes on page 6 of the Office Action, **Wenderoth et al.** does not disclose an antifreeze concentrate containing component a) of present Claim 1. A representative sample of **Wenderoth et al.** is shown in Table 1 on page 10 of the present

specification along with the 5-component concentrate of the present invention, which confirms that component a) of present Claim 1 is not present in the compositions of this reference. In Table 2 (page 11), the corrosion resistance properties of the present invention are shown to be much greater than that of the representative sample of **Wenderoth et al.**

Ashikhmin et al. may disclose engine coolant compositions comprising 0.05 to 1.5 wt% of triethyleneglycol. However, no suggestion or motivation is present in this reference to replace component a) of **Wenderoth et al.** with the triethyleneglycol of **Ashikhmin et al.** The reference does not disclose that the triethyleneglycol is necessary for improving corrosion resistance properties, and one of skill in the art would not be taught by this reference to add the triethyleneglycol to the concentrates of **Wenderoth et al.** Every component in present Claim 1 is necessary for reducing corrosion. One of skill in the art would not be taught by the disclosures of these references, either individually or combined, to add specifically the triethylene glycol of **Ashikhmin et al.** (who is otherwise silent in regard to components b) and c)) with the components of **Wenderoth et al.** to produce the present claimed antifreeze concentrates. Accordingly the rejection should be withdrawn.

The rejection of Claims 7 and 11–13 under 35 U.S.C. § 112, second paragraph, is obviated by amendment to these claims. Accordingly, the rejection should be withdrawn.

The objections to Claims 1–13 and the specification are obviated in part by amendment. Applicants note that the term “etheroxygen” is correct and is presented as intended. The term is representative of an oxa-group (–O–). For example, the 2–5 carbon atoms of an amine of component (c) may be interrupted by an oxygen atom or the oxygen atom is optionally available as substituent resulting in a hydroxyl group. This interpretation and understanding of the term “etheroxygen” is consistent with the common knowledge of those skilled in the art.

Applicants acknowledge the request for a new Abstract and have complied therewith.

Applicants submit that the application is now in condition for allowance. Early notification of such action is earnestly solicited.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.



Stephen G. Baxter
Attorney of Record
Registration No. 32,884

Customer Number
22850

Tel: (703) 413-3000
Fax: (703) 413 -2220
(OSMMN 08/07)